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MOTOROLA INC 600 NORTH US HIGHWAY 45 W4 - 39Q LIBERTYVILLE, IL 60048-5343			EXAMINER	
			FOUD, HICHAM B	
			ART UNIT	PAPER NUMBER
			2419	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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### Office Action Summary

**Application No.**

10/656,568

**Applicant(s)**

SPEAR ET AL.

**Examiner**

HICHAM B. FOUAD

**Art Unit**

2419

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 12-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9 and 12-23 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

**Response to Amendment**

1. The amendment filed on 10-22-2008 has been entered and considered.

Claims 1-9 and 12-23 are pending in this application.

Claims 10-11 have been canceled.

Claim 4 is objected to.

Claims 1-3, 5-9 and 12-23 remain rejected as discussed below.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies et al (US 6,526,267), hereinafter is referred to as Jokimies in view of Nam (GB 2383215 A).

For claim 1, Jokimies discloses a method in a wireless communications device, the method comprising: determining a distance of the wireless communications device from a base station (see Figure 1 step 5 "determine distances" and Figure 4); determining timing advance using a look-up table, at the wireless communications device, for the base station based on the distance of the wireless communications device from the base station (see Figure 1 steps 5 and 6 "determine distance" and "measure TA". Also see column 3 lines 15-19; the distances to each base station are determined and

**stored**; therefore, it must be a database or a look-up table of **stored** distances and it is conventional that TA is computed using distance. Thus, TA is measured using the look-up table of stored distances).

Jokimies discloses all the subject matter with the exception of explicitly disclosing the use of the timing advance determined for transmitting to the base station. However, Nam discloses the use of the timing advance for transmitting to the base station (see page 11 lines 1-4; the mobile terminal receives the TA (Timing Advance) signal and advances its transmission timing to correctly synchronize its transmission; inherently, uses the timing advance for transmitting to the base station). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the TA as taught by the system of Nam into the invention of Jokimies for the purpose of synchronization and communication to the base station.

For claim 2, Jokimies in view of Nam discloses, determining a location of the wireless communications device (Jokimies: see column 3 lines 27-30; detecting the home area), determining the distance of the wireless communications device from the base station using the location of the wireless communications device and a location of the base station (Jokimies: see Figure 4 and column 4 lines 47-54; the mobile station determines the distances to the base stations).

For claim 5, Jokimies discloses a method, obtaining the location of the base station based on receiving a message including base station location information (see Figure 1 step 4; receiving RSS (received signal strength)).

For claim 6, Jokimies in view of Nam discloses a method, obtaining the location of the base station from a table of base station locations stored on the wireless communications device (Jokimies: see Figure 1, Figure 4 and see column 3 lines 15-19; the distances to each base station are determined and **stored**; therefore, it must be a database or a look-up table of **stored** distances. Nam: see page 15 lines 15-20).

For claim 7, Nam discloses a method, obtaining the base station locations stored in the table by downloading to the wireless communications device (see page 15 lines 21-23; wherein the table of base station locations includes at least the three base stations contacted and see page 16 lines 2-10; wherein the location of the base station is transmitted as a message; inherently, the table is downloaded to the wireless communications device upon receiving that message).

For claim 8, Jokimies discloses a method, determining the timing advance at in the wireless communications device for transmitting voice over a packet network (see Figure 1 wherein the determination of TA is at the mobile station and column 3 line 20-21, the present invention is applicable to GSM; inherently, those networks support voice over packet).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies in view of Nam, and in further in view of Carlsson (US 6,603,978).

For claim 3, Jokimies in view of Nam discloses all the subject matter with the exception of the wireless communications device includes a satellite positioning system receiver, determining the location of the wireless communications device by obtaining a

satellite positioning system based location fix. However, Carlsson discloses a wireless communications device includes a satellite positioning system receiver (see Figure 2 element 130; 130 is the GPS receiver in the mobile terminal 100), determining the location of the wireless communications device by obtaining a satellite positioning system based location fix (see column 4 lines 50-52). Thus, it would have been obvious to the one skill in the art at the time of the invention to add the GPS receiver in the component of a mobile station as taught by the invention of Carlsson into the system of Jokimies and Nam for the purpose of receiving GPS signals from the satellites and getting the exact position of the mobile in the world.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jokimies in view of Nam and in further in view of the background of the invention of Bontempi (2002/0150092) et al hereinafter referred to as bontempi.

For claim 9, Jokimies in view of Nam discloses all the subject matter with the exception of determining the timing advance at in the wireless communications device during a push-to-talk session over a packet network. However the background of the invention of Bontempi teaches the voice of Internet protocol (VoIP) in any telecommunication system and the use of the push-to-talk system, which is a call Group communication that allows active users in the specific subscriber group to communicate using "push-to-talk, release-to-listen" feature (see page 1 paragraph 0008). Thus, it would have been obvious to the person of ordinary skill in the art at the invention to use the push-to-talk system as taught by the background of the invention of Bontempi in the communication network of Jokimies and Nam to determine the timing advance during

the push-to-talk session. The motivation of using the push-to-talk communication being that is a short call setup time and makes the push-to-talk type of speech calls attractive to several other types of users.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 12-17 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al (US 2003/0139188), hereinafter referred to as Chen.

For claim 12, Chen discloses a method in a wireless communications device, the method comprising: obtaining first timing information for the wireless communications device at a first known location relative to a base station (see Figure 3, d(TA<sub>lo</sub>)); obtaining second timing information for the wireless communications device at a second known location relative to the base station (see Figure 3, d(TA<sub>up</sub>)); determining a location of the base station based on the first and second timing information and based on the first and second known locations (see page 2 paragraph 0025 lines 17-21).

For claim 13, Chen discloses a method in wireless communications device, the method comprising: determining a difference between a current cell timing and a prior

cell timing for a common serving cell (see Figure 3, wherein TA<sub>up</sub> is current cell timing and TA<sub>low</sub> is a prior cell timing and the difference is the TA of MS 22); determining a current timing advance for the common serving cell using the difference between the current cell timing and the prior cell timing and using a prior timing advance corresponding to the prior cell timing (see page 2 paragraph 0025 lines 16-17; base station determines a TA value for MS22).

For claim 14, Chen discloses a method using the current timing advance for communicating with the network (see page 2 paragraph 0024 lines 7-10; the use of the TA value to reposition the uplink burst; inherently, using the TA to communicate with the network), determining the current timing advance before communicating with the network (see page 2 paragraph 0024 lines 6-10; the TA is calculated before using it).

For claim 15, Chen discloses a method in a wireless communications device having a look-up table providing timing advance information associated with different locations relative to at least one base station (see Figure 3, TA<sub>lo</sub> and TA<sub>up</sub> which are two different timing advances associated with different locations and see page 2 paragraph 0024 lines 6-7; the TA is sent to MS 22; inherently, MS 22 has the TA's which are considered as a look-up table), the method comprising: determining a location of the wireless communications device (see page 2 paragraph 0025 lines 17-21); determining timing advance information for the location of the wireless communication device from the look-up table (see page 2 paragraph 0025 lines 16-17; base station determines a TA value for MS22 using TA<sub>lo</sub> and TA<sub>up</sub>).



For claim 16, Chen discloses a method, determining timing advance information for the location of the wireless communication device using timing advance information in the look-up table only if the location of the wireless communications device is within a specified distance of a location in the look-up table for which timing advance information is provided (see page 2 paragraph 0025 lines 16-17; base station determines a TA value for MS 22 using TA\_lo and TA\_up and see Figure 3 wherein the location of MS 22 is within a specified distance of  $d(TA\_lo)$  and  $d(A\_up)$ )).

For claim 17, Chen discloses a method, obtaining timing advance information from a source other than the look-up table if the location of the wireless communications device is not within a specified distance of a location in the look-up table for which timing advance information is provided (see page 2 paragraph 0025 lines 16-17; base station is the source that determines a TA value for MS 22 using TA\_lo and TA\_up and see Figure 3 wherein the location of MS 22 is not within a specified distance of the base station).

For claim 20, Chen discloses a method in a wireless communications device, the method comprising: determining timing advance on the wireless communications device (see page 2 paragraph 0024 lines 6-7); transmitting a modified burst to a network using the timing advance determined on the wireless communications device (see page 2 paragraph 0024 lines 7-10; transmitting a burst at a time corresponding to the TA value).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Scott.

For claims 21 and 22, Chen discloses all the subject matter with the exception of transmitting a modified access burst having a reduced guard time relative to an un-modified access burst and transmitting a modified normal burst having an increased guard time relative to an un-modified normal access burst, without first transmitting an access burst. However, Scott teaches that the increase or the decrease of the guard time is relative to the propagation delay time and can be expressed by a number of bits or chips and resulting the advancing or retarding the timing by the number of bits or chips specified (see column 11 line 62 to column 12 line 14). Thus, it would have been obvious to the person of ordinary skill in the art at the invention to use the increase / decrease of the guard time to prevent the interference.

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Johnson (US 5,839,071).

For claim 23, Chen discloses all the subject matter with the exception of receiving a timing advance correction from the network after sending the modified burst

to the network. However, Johnson teaches that a base station provides a timing advance TA number that indicates the number of bits in advance, which the mobile station should transmit its bursts. Moreover, the corrected TA will be determined at the call setup and will be provided to the mobile station (see column 9 lines 54-67). Thus, it would have been obvious to the person of ordinary skill in the art at the invention to use the method of Johnson in the communication of Chen to prevent the delay, which occurs when the mobile station is very close to the base station.

9. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Jokimies.

Form claim 18, Chen discloses all the subject matter without explicitly disclosing the update of the look up table with the TA information from a source other than the look-up table. However, Jokimies discloses the update of the TA by the mobile station from base stations (see Figure 1 steps 4-6 and Figure 4 and page 4 column 13-16). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the update of TA when the mobile station is moving around as taught by the invention of Jokimies into the system of Chen for the purpose of monitoring the mobile station and figuring out if it still within its home area.

For claim 19, Jokimies discloses the use of TA when communicating voice over a packet network (see Figure 2 that uses GSM standards).

***Allowable Subject Matter***

10. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Response to Argument**

11. Applicant's arguments filed have been fully considered but they are not persuasive.

For claim 1 and in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a look-up table *stored* on the device) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, the claim limitation "using a look-up table" is very broad and the applicant does not elaborate on how the TA and/or the look-up table are determined. According to Jokimies, the distances of each base station is determined and stored. Therefore, Jokimies must have storage for the determined distances, otherwise how can he store the determined information? Moreover, the TA is measured based on distance (see Figure 1 steps 5 and 6). Thus, the storage of the determined distances of Jokimies reads on the claimed look-up table.

For claim 6, Nam further discloses in page 15 lines 15-20, that the MS stores locations of base station (longitudes and latitudes)

For claim 12 and in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which

applicant relies (i.e., the MS obtain first and second timing information based on corresponding known locations of the MS and the MS determine the location of the BS based on the first and the second timing information) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Also, the recitation "a method in a wireless communications device" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Moreover, Applicant argues that Chen does not teach "determining a location of the BS based on first and second timing information". Examiner respectfully disagrees; the feature of the limitation listed above is clearly met by Chen. Chen explicitly designates the location of the BS based on first and second timing information (see Figure 3) in regard of the location of MS because if the BS knows where the MS is, the BS location is determined comparing to the determined MS location. Chen does not choose to use his own lexicography to designate the location of the BS. However, the steps performed by Chen are the same regardless to the terminology used.

Claim 13 is argued for the same reasons as claim 12. Moreover, the claim language is very broad and does not specify how the TA is determined as the original disclosure of Figure 6. Therefore, claims are given their broadest reasonable interpretation. The Federal Circuit's *en banc* decision in *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) because although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

For claim 15, the Applicant argues that Chen does not teach the limitations of claim 15. Examiner respectfully disagrees; the feature of the limitation listed above is clearly met by Chen. Chen explicitly designates a method in a wireless communications device having a look-up table providing timing advance information associated with different locations relative to at least one base station (see Figure 3, TA\_lo and TA\_up which are two different timing advances associated with different locations and see page 2 paragraph 0024 lines 6-7; the TA is sent to MS 22; inherently, MS 22 has the TA's which are considered as a look-up table), the method comprising: determining a location of the wireless communications device (see page 2 paragraph 0025 lines 17-21); determining timing advance information for the location of the wireless communication device from the look-up table (see page 2 paragraph 0025 lines 16-17; base station determines a TA value for MS22 using TA\_lo and TA\_up). Chen does not choose to use his own lexicography to designate the location of the BS. However, the steps performed by Chen are the same regardless to the terminology used.

For claims 16-17 and 20, the applicant is arguing that in Chen, the BS determines the TA. However, the examiner clarifies that the determined TA is sent to the MS (see page 2 paragraph 0024 lines 6-7; the TA is sent to MS 22) and therefore, the TA is also determined by the MS since the term "determining" is broad and can have many interpretations. (See the rejection above).

For claims 21-22, the Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

For claim 23 and in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

For claims 18-19, the argument in regard of claim 15 is maintained

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

**13. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**14. Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

When responding to this office action, applicants are advised to clearly point out the patentable novelty which they think the claims present in view of the state of the art disclosed by the references cited or the objections made. Applicants must also show



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how the amendments avoid such references or objections. See 37C.F.R 1.111(c). In addition, applicants are advised to provide the examiner with the line numbers and pages numbers in the application and/or references cited to assist examiner in locating the appropriate paragraphs.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hicham B. Foud whose telephone number is 571-270-1463. The examiner can normally be reached on Monday - Friday 10-6 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hicham B Foud/  
Examiner, Art Unit 2419  
01/01/2009

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2419